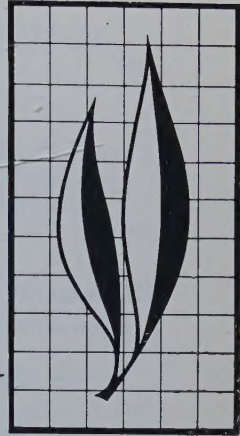
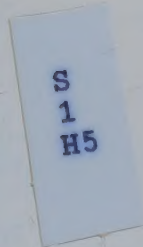


HILGARDIA

A JOURNAL OF AGRICULTURAL SCIENCE PUBLISHED BY
THE CALIFORNIA AGRICULTURAL EXPERIMENT STATION



VOLUME 41

July, 1971, to May, 1973

U. of ILL. LIBRARY

AUG 23 1973

CHICAGO CIRCLE

UNIVERSITY OF CALIFORNIA DIVISION OF AGRICULTURAL SCIENCES

CONTENTS

PAGE

No. 1, JULY, 1971

- PAGE, A. L., T. J. GANJE, and M. S. JOSHI. Lead quantities in plants, soil, and air near some major highways in southern California..... 1

No. 2, SEPTEMBER, 1971

- HILDEBRAND, D. C., and BEVERLY RIDDLE. Influence of environmental conditions on reactions induced by infiltration of bacteria into plant leaves..... 33

No. 3, SEPTEMBER, 1971

- BRADFORD, GORDON R. Trace elements in the water resources of California... 45

No. 4, SEPTEMBER, 1971

- Tree volume equations and tables from dendrometer measurements
 I. WENSEL, LEE C. Tree volume equations and measurements taken with a Barr and Stroud optical dendrometer..... 55
 II. WENSEL, L. C., and RICHARD L. SCHOENHEIDE. Young growth gross volume tables for Sierra redwood [*Sequoia gigantea* (Lindl.) Deene] 65

No. 5, NOVEMBER, 1971

- Studies on *Diplodia* and *Diplodia*-like fungi
 IV. HEWITT, W. B., R. K. WEBSTER, and M. M. SATOUR. Effects of pH, temperature, light, and vitamins on certain taxonomic characters.... 77
 V. WEBSTER, R. K., W. B. HEWITT, and M. M. SATOUR. Effects of carbon: nitrogen ratio on growth, pycnidia, and pycnidiospore formation 95
 VI. WEBSTER, R. K., and W. B. HEWITT. Effects of natural substrates on variability in taxonomic characters..... 107

No. 6, OCTOBER, 1971

- GARRETT, W. N., G. P. LOFGREEN, and J. L. HULL. Influence of processing method on energy utilization of feed grains..... 123

No. 7, DECEMBER, 1971

- KNABKE, J. J., and A. A. GRIGARICK. Biology of the African earwig, *Euborellia cincticollis* (Gerstaecker), in California and comparative notes on *Euborellia annulipes* (Lucas)..... 157

No. 8, FEBRUARY, 1972

- BINGHAM, F. T., A. W. MARSH, R. BRANSON, R. MAHLER, and G. FERRY. Reclamation of salt-affected high boron soils in western Kern County..... 195

No. 9, FEBRUARY, 1972

- SALAS, J. A., and J. G. HANCOCK. Production of the perfect stage of *Mycena citricolor* (Berk. and Curt.) Sacc..... 213

No. 10, FEBRUARY, 1972

- LUTHIN, J. N., and A. HAIG. Some factors affecting flow into drainpipes..... 235

No. 11, FEBRUARY, 1972

- MOFFITT, H. R., and H. T. REYNOLDS. Bionomics of *Empoasca solana* DeLong on cotton in southern California..... 247

No. 12, OCTOBER, 1972

- NELSON, RICHARD D., and EUGENE M. STAFFORD. Effects of gamma-radiation on the biology and population suppression of the two-spotted spider mite, *Tetranychus urticae* Koch..... 299

No. 13, NOVEMBER, 1972

- Ecology of tetranychid mites and their natural enemies: A review
III. VAN DE VRIE, M., J. A. MCMURTRY, and C. B. HUFFAKER. Biology, ecology, and pest status, and host-plant relations of tetranychids..... 343

No. 14, DECEMBER, 1972

- ROLLINS, W. C., MOIRA TANAKA, C. F. G. NOTT, and R. B. THIESSEN. On the mode of inheritance of double-muscle conformation in bovines..... 433

No. 15, DECEMBER, 1972

- SONODA, R. M., and J. M. OGAWA. Ecological factors limiting epidemics of hop downy mildew in arid climates..... 457

No. 16, JANUARY, 1973

- JENSEN, H. E., and K. L. BABCOCK. Cation-exchange equilibria on a Yolo loam 475

No. 17, JANUARY, 1973

- MILLER, DOUGLASS R., and HOWARD L. MCKENZIE. Seventh taxonomic study of North American mealybugs (Homoptera: Coccoidea: Pseudococcidae) 489

No. 18, MARCH, 1973

- QUEZADA, JOSÉ R., PAUL DEBACH, and DAVID ROSEN. Biological and taxonomic studies of *Signiphora borinquensis*, new species (Hymenoptera: Signiphoridae), a primary parasite of diaspine scales..... 543

No. 19, MARCH, 1973

- FELDMAN, SANFORD E., NACHUM SNAPIR, MIKIO YASUDA, FRANK TREUTING, and SAMUEL LEPKOVSKY. Physiological and nutritional consequences of brain lesions: A functional atlas of the chicken hypothalamus..... 605

No. 20, APRIL, 1973

- QUEZADA, JOSÉ R., and PAUL DEBACH. Bioecological and population studies of the cottony-cushion scale, *Icerya purchasi* Mask., and its natural enemies, *Rodolia cardinalis* Mul. and *Cryptochaetum iceryae* Will., in southern California 631

No. 21, MAY, 1973

- WEBSTER, R. K., D. H. HALL, J. BOLSTAD, C. M. WICK, D. M. BRANDON, R. BASKETT, and J. M. WILLIAMS. Chemical seed treatment for the control of seedling disease of water-sown rice..... 689

